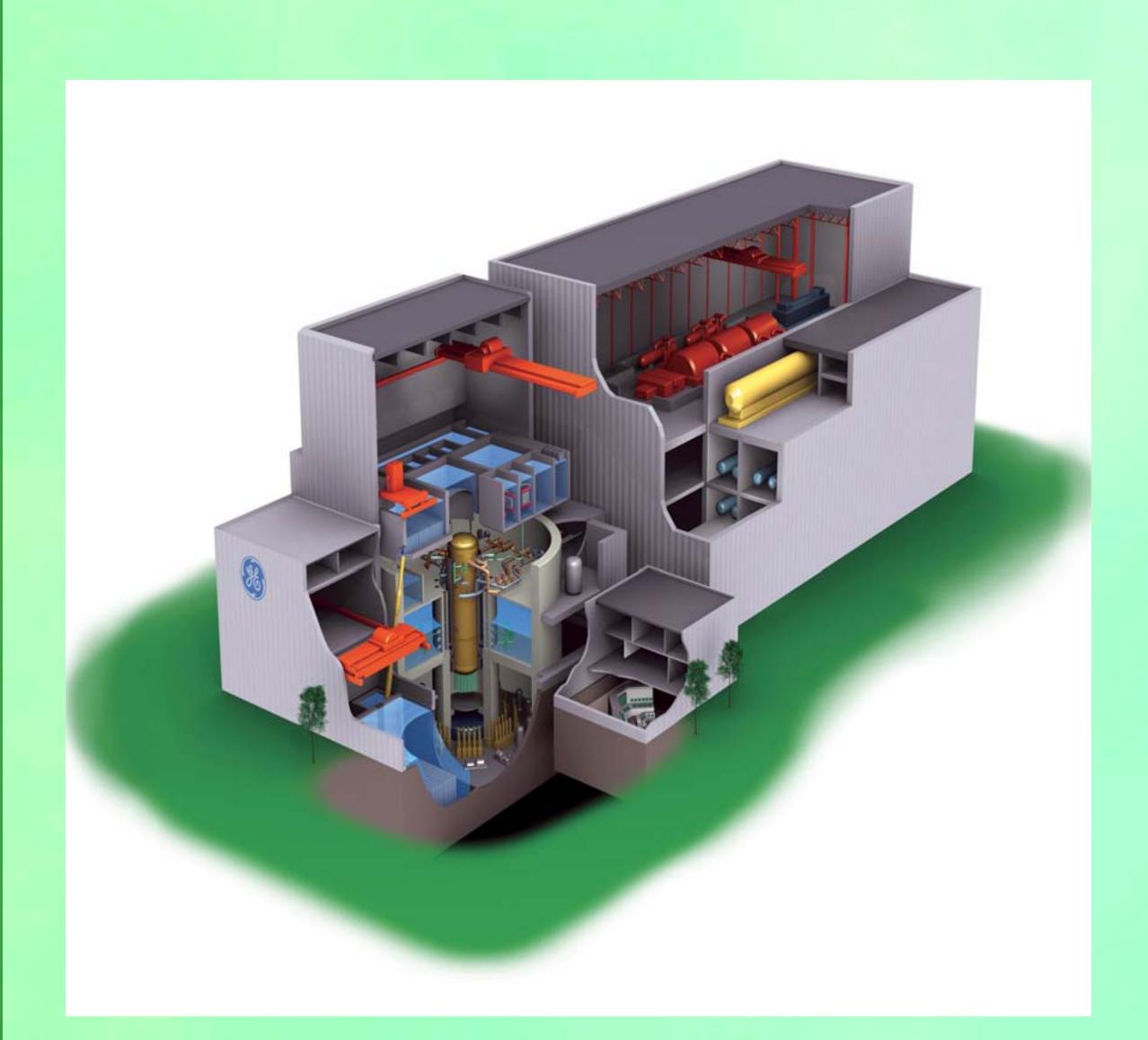


Office of New Reactors

# New Reactor Designs Under Review



# Economic and Simplified Boiling Water Reactor

#### Features:

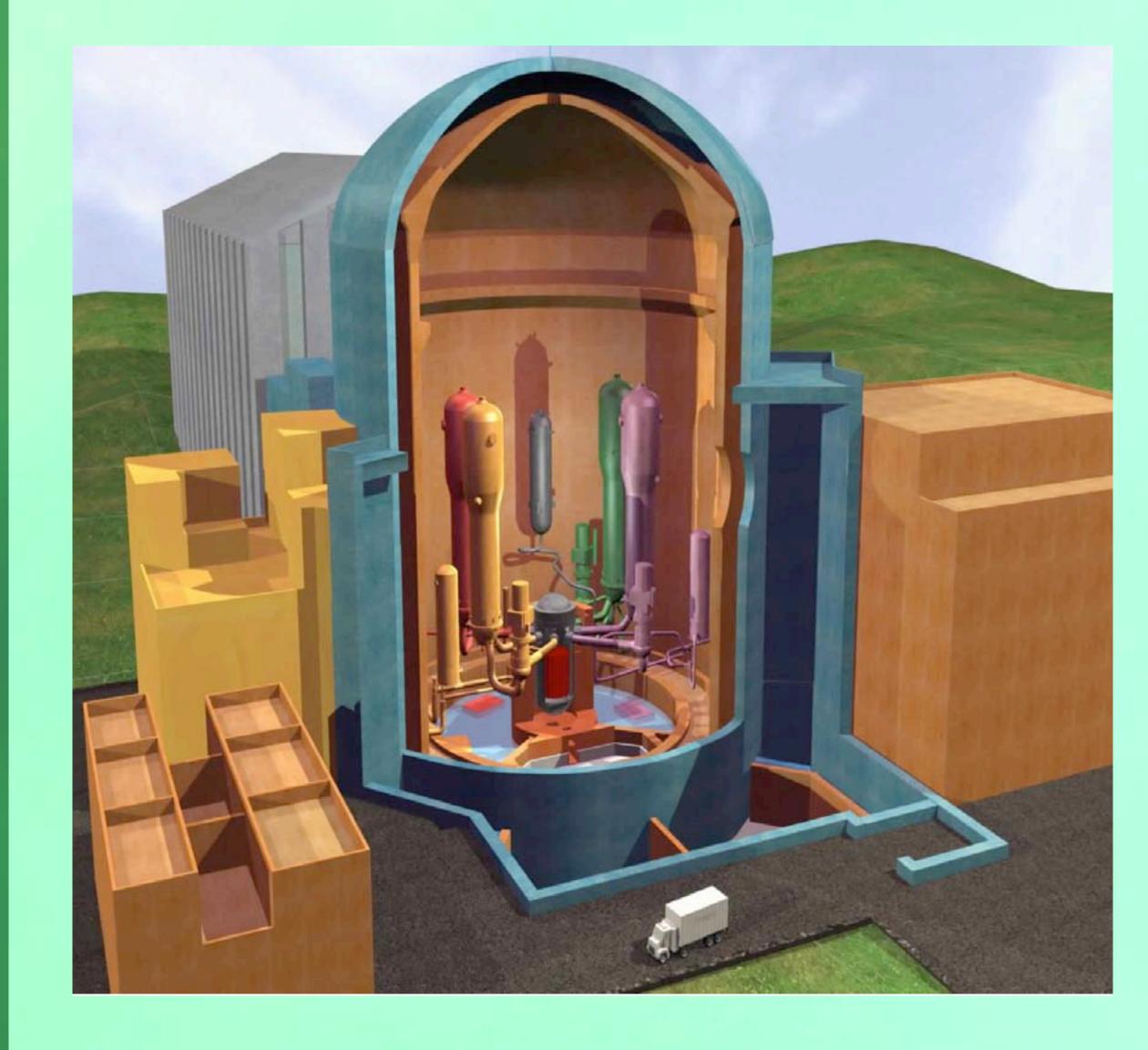
- 1390 MWe (Megawatt electric)
- Based on Simplified Boiling Water Reactor (BWR) and Advanced BWR
- Natural circulation
- Passive safety systems

#### Certification Status:

- Design certification application submitted August 2005.
- Review underway

#### Combined License Applications Submitted:

 North Anna, Grand Gulf, Victoria County, River Bend, Fermi



### Evolutionary Power Reactor

#### Features:

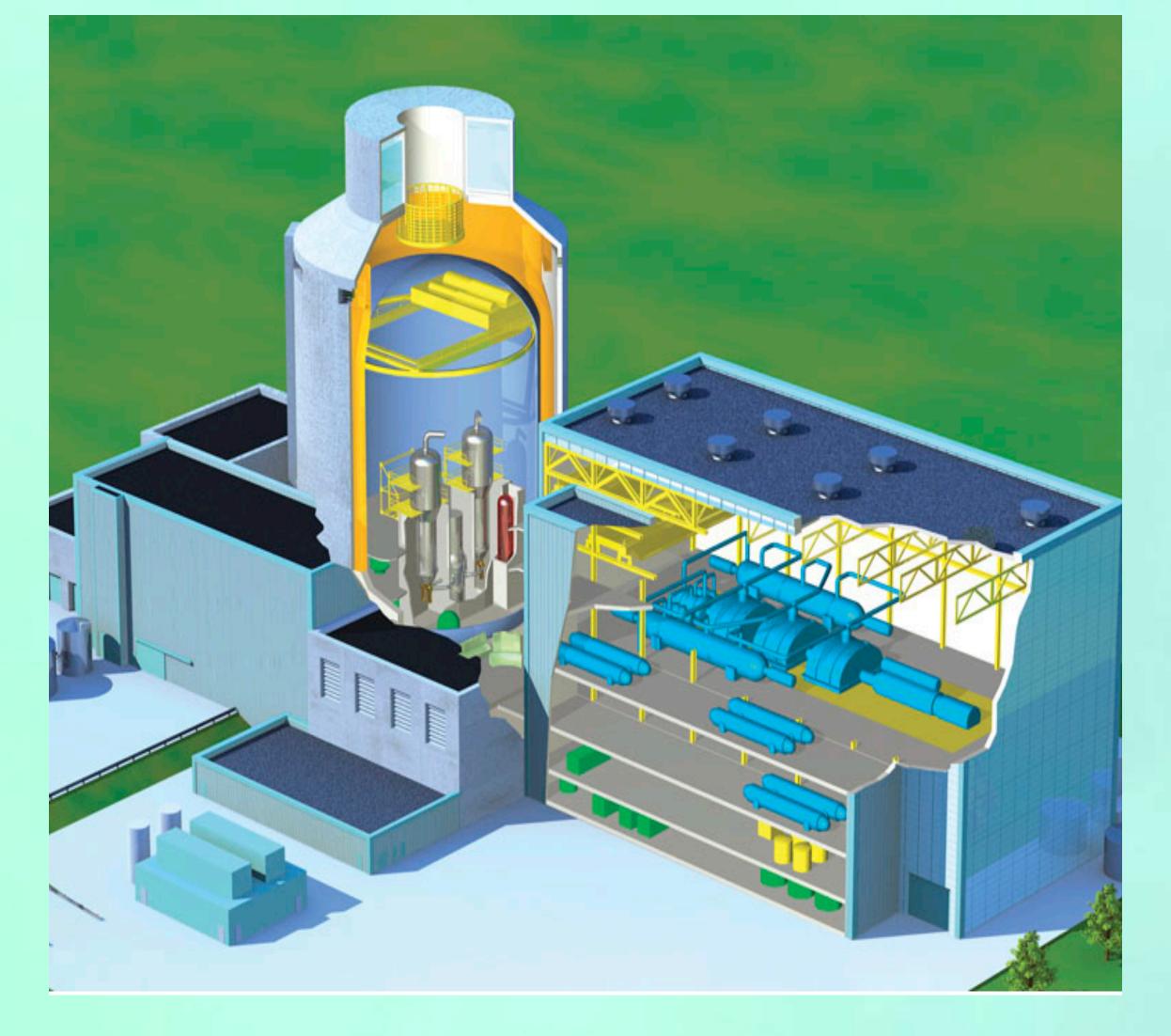
- 1600 MWe
- Four 100 percent capacity engineered safety trains
- Double-walled containment

#### **Certification Status:**

- Design certification application submitted December 2007
- Review underway

#### Combined License Applications Submitted:

 Calvert Cliffs, Callaway, Bell Bend, Nine Mile Point



## Advanced Passive 1000

#### Features:

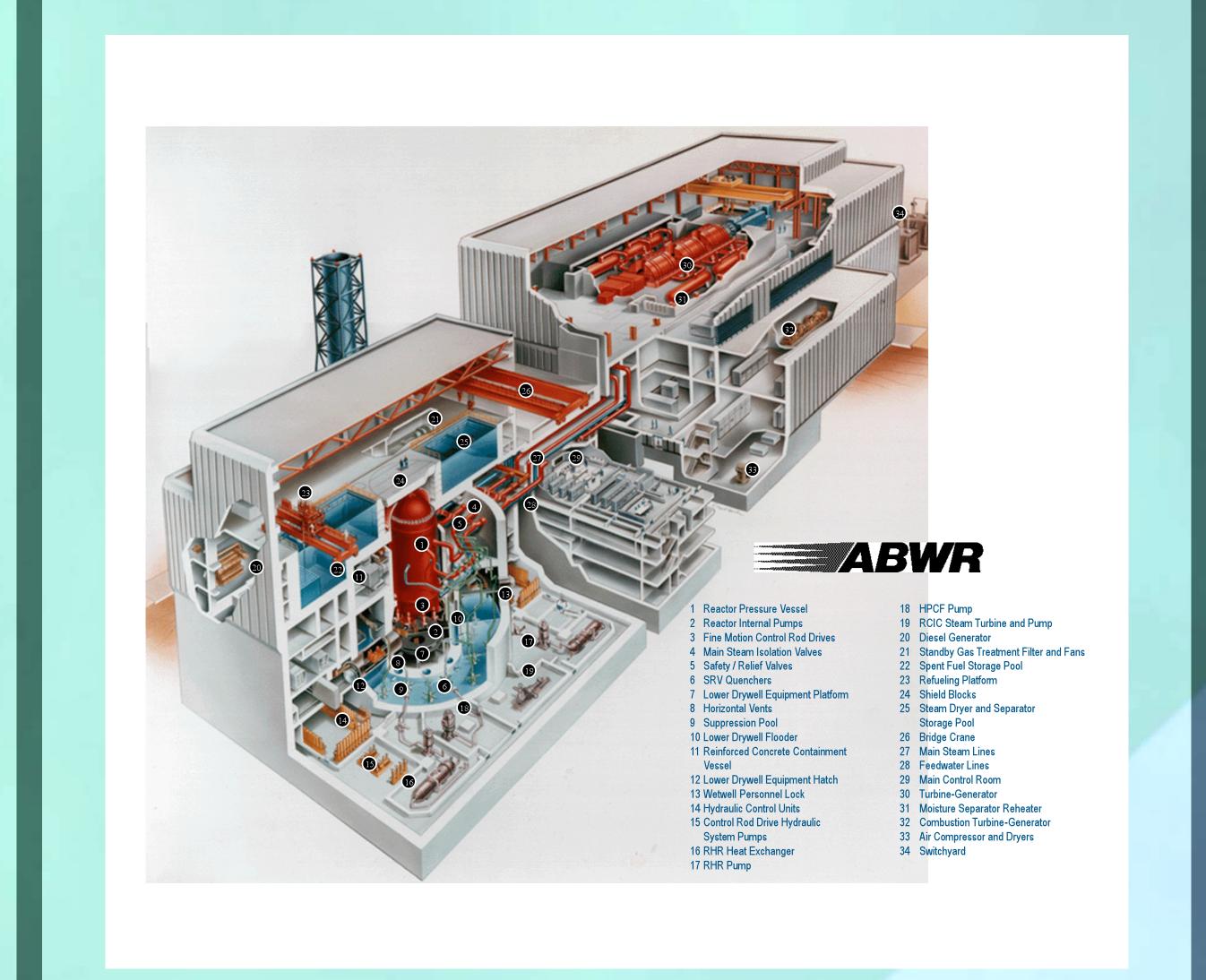
- 1117 MWe
- Passive containment cooling system with steel containment vessel and natural circulation air flow
- Gravity-drain core makeup tanks and refueling water storage tanks
- Natural circulation heat exchangers

#### Certification Status:

- Certified December 2005
- Amendment under review

### Combined License Applications Submitted:

 Bellefonte, Lee Station, Harris, Vogtle, Summer, Levy County, Turkey Point



#### Advanced Boiling Water Reactor

#### Features:

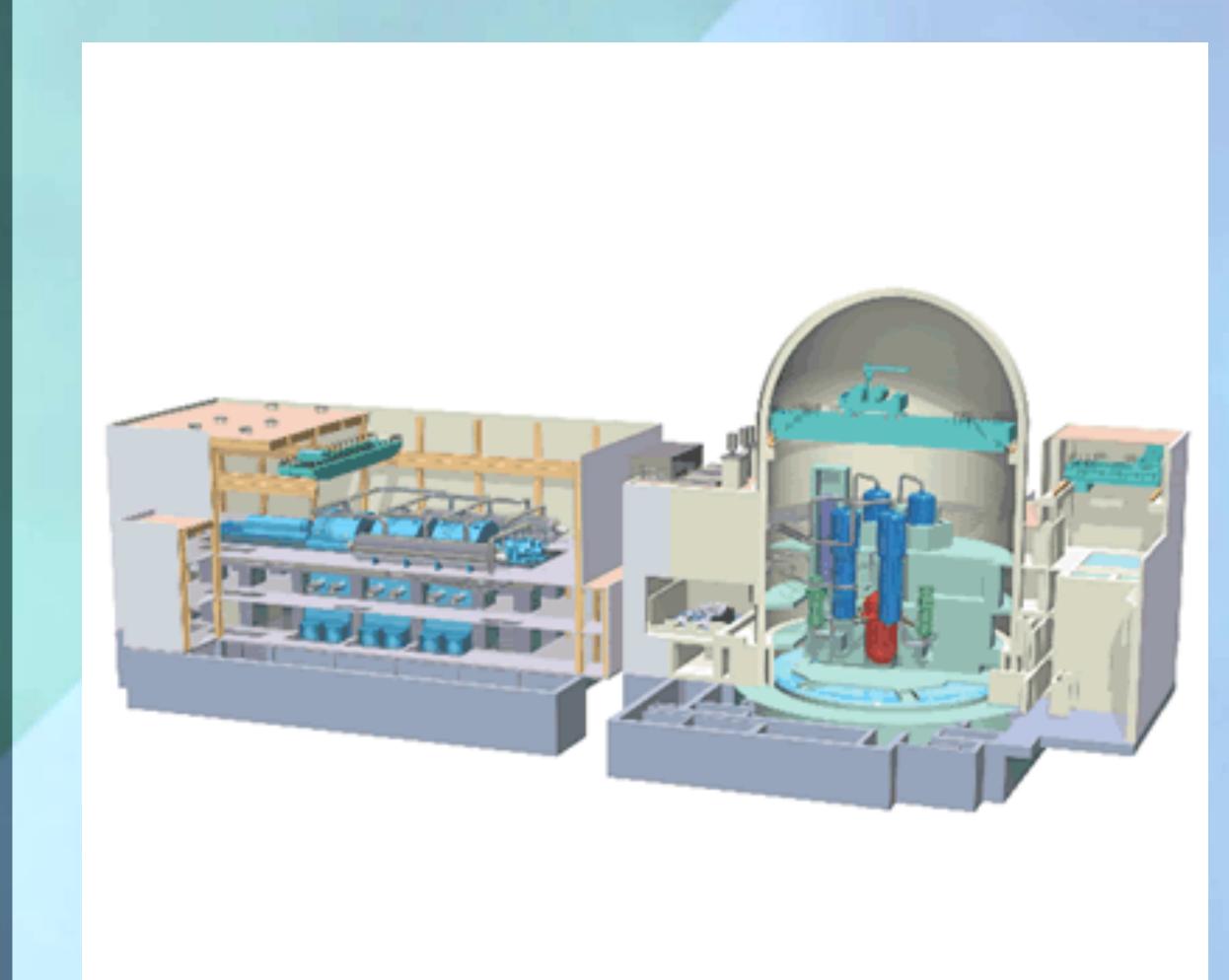
- 1350 MWe
- Vessel-mounted internal recirculation pumps
- Fine motion control rod drives
- Three full-train emergency core cooling systems

#### Certification Status:

- Certified May 1997
- Amendment under Review

### Combined License Application Submitted:

South Texas Project



#### U.S. Advanced Pressurized Water Reactor

#### Features:

- 1700 MWe
- Four-train configuration
- Redundant digital control systems
- In-containment refueling water storage pit

#### **Certification Status:**

- Design Certification application submitted December 2007
- Review underway

#### Combined License Application Submitted:

Comanche Peak

Knowledge for Today and Tomorrow